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CURIOSITIES OF POISONS.

In popular language, a poison is a substance which, administered in small doses, destroys life. Obviously, however, the toxicologist must of necessity enlarge the definition, and embrace many substances not generally accepted as poisons. No one outside the faculty would, for example, consider such well-known medicines as cream of tartar, tartaric acid, alum, Epsom salts, and even ordinary table salt, to be poisons, and yet each of these substances has been the cause of more than one accidental or criminal fatality. Not only so, but the commonest of domestic remedies may be made, by abuse, to come under the cognisance of the toxicologist. A number of years ago, a paragraph appeared in some of the medical journals concerning the death of an innkeeper from the effects of a quack pill. It appeared that the man was in the habit of taking the pills to such excess that he was often obliged to send for medical advice to cure him. Being warned against the danger of the practice, he began to take them in secret, excusing the number that he still continued to buy by stating that he gave them to his horses. A post-mortem examination left no doubt whatever about the cause of his death. We merely quote the case to show the truth of the aphorism, that while a poison may in small doses be a medicine, a medicine in large doses may also be a poison.

Modern investigation and discovery, especially into those subtle and active principles derived from the vegetable kingdom, have undoubtedly done much to enlarge the scope, and render the study of toxicology more elaborate and difficult than it was in more remote times. Still, early investigators seem to have been aware of what, even in this enlightened age, may be called a fundamental principle of the treatment of cases of poisoning—namely, the prevention of the absorption of the poison into the system. Thus, Nicander, Galen, and Dioscorides all recommend the application of cupping instruments, sucking the wound, cauterising with hot irons, and the application of leeches in the treatment of bites from venomous animals and insects. On the same principle, hot oil was a common remedy for internal poisoning, on the supposition that the oil not only acted as a quick emetic, but also prevented the poison from being absorbed into the system. It is curious to notice in passing how thoroughly modern practice is in accord with the principles here laid down nearly seventeen centuries ago. Let any one, however ignorant in other respects, be bitten by a dog or cat, particularly in the summer season, when rabies is thought to prevail, and the first impulse is to get the wound cauterised. If this is impossible, the more primitive plan of sucking the wound is almost instinctively adopted. In like manner, for internal poisoning there is scarcely an instance, even with all the many subtle organic poisons of the present time, in which the free administration of emetics, followed by oleaginous or mucilaginous drinks, to prevent absorption, is not applicable. Again, it was remarked by Avicenna, in the beginning of the eleventh century, that venesection should not take place unless where the poison was distributed over the whole system, as, when the veins were full, the poison could not get admission into them. The wisdom of this observation has been amply confirmed by the researches of Orfila, Magendie, Paris, and others in the present century. Not only have such specialists investigated the action of poisons on the human system, and thus demonstrated what was previously, to a great extent, mere conjecture, but they have also instituted a scientific treatment of poisoning, which sharply marks the toxicology of the present time from that of any other age—namely, the use of chemical antidotes. The importance of this last point can only be properly estimated when we consider the number and potency of many of the chemical and medicinal poisons discovered in recent times.

Tartar emetic, which probably, next to arsenic, has attained the most unenviable notoriety in our day for criminal proceedings, was discovered towards the middle of the seventeenth

century. Hydrocyanic acid, the most potent of poisons, the vapour of which, accidentally inhaled, has been known to produce serious consequences, was only discovered towards the latter end of the eighteenth century. Oxalic acid, which has probably caused more deaths than any other poison from accidental administration, owing to its having a somewhat distant resemblance to the well-known medicine Epsom salts, was discovered about the same period. Morphia, the most important and useful of the vegetable poisons, although known in a very impure state as 'Magisterium Opii' in the seventeenth century, was not obtained as a well-defined base until the beginning of the nineteenth century. Strychnine was discovered about the same time; while aconitine—first brought into distinctive prominence in this country in connection with the notorious criminal Lamson—was discovered a few years later still. After this, in rapid succession, followed the discovery of nicotine, the active principle of the tobacco-plant; atropine, the active principle of the deadly nightshade; chloroform, the well-known anæsthetic; and chloral, long considered a chemical curiosity, but, within the last few years, manufactured and used as an opiate by the hundredweight. Medicine has at the same time been enriched by the addition of such powerful agents as the ordeal or Calabar bean of Africa, and the arrow-poison or curara of the Indians.

The very mention of these deadly agents is sufficient to indicate the difficulty and importance of the work of the toxicologist, as well as of medical men generally, at the present time. The difficulty and importance lie in various directions, but particularly in the preliminary detection of the symptoms of poisoning, in the prompt administration of the most suitable antidotes, and in the post-mortem detections of the poison in cases of death. This last point is not the least important, as one curious fact in connection with the majority of the foregoing poisons is the rapidity of their decomposition, and the consequent difficulty of detecting them shortly after death. This is characteristic of every organic poison; but several of those just mentioned are *not* of organic origin, such as hydrocyanic acid, chloroform, chloral, &c., and yet, being volatile, or readily decomposed into volatile principles, they also very soon escape the possibility of detection. This is not the case, however, with the older and better known mineral poisons, as they are all indestructible by the lapse of time. Several well-authenticated cases of the detection of mineral poisons long after death are given in every text-book on Poisons; but the following remarkable cases have not been cited, so far as we are aware.

A wealthy county farmer in England having died, was buried in the tomb where his father had been interred thirty-five years before. An examination of certain of the bones of the father disclosed brilliant particles of a metallic-looking substance, which, on being collected together, presented a considerable quantity of what was proved to be oxide of mercury. The mercury had thus been preserved for more than the third of a century in the body of the deceased, the probability being that he had been in the habit of taking it medicinally during the latter part of his life. An equally remarkable case, or rather series of cases, came under the notice of the late eminent chemist, Mr Heripath of Bristol, in which he found abundant traces of arsenic in the bodies of several young children after a lapse of eight years; the evidence both of criminal poisoning and of the presence of the poison used being so clear, that the jury without hesitation returned a verdict 'that the deceased children died from the effects of arsenic, but how or by whom administered, there is no evidence to show.'

The presence of small quantities of certain metallic poisons, such as arsenic, copper, lead, or mercury, in the system does not, however, necessarily imply either accidental or criminal poisoning. Mercury in one form or another is often administered as medicine; lead is frequently present in our food as well as in the water we drink; copper is used to give certain preserved vegetables the bright green of the fresh fruit; while arsenic is so frequently met with in nature that a French chemist undertook to find it in the legs of any old chair! It is found in considerable traces in certain soils; and this fact led at least in one instance to the acquittal of a prisoner indicted for murder, through the ingenious suggestion, that the arsenic found in the body might have filtered through the wet soil into a crack found in the lid of the coffin, and thus passed on to the body where it was found. There is no end to the ingenuity of counsel in such cases. In another instance, arsenic was found in the liquid contents of the stomach in considerable quantity; but the analysis in this case had not extended to the tissues. The counsel in defence contended that the proof of poisoning had failed, inasmuch as the medical evidence should have proved the absorption of the poison by the tissues to produce poisoning. The prisoner was acquitted. Not less ingenious was the defence of counsel in the case of Madeline Smith in 1857 for the murder of L'Angelier at Glasgow by the administration of arsenic. Counsel founded their defence mainly on two points. The first was the fact, that eighty-eight grains of arsenic had been found in the body, and that such a large dose had never before been proved to have been unconsciously swallowed; arguing from this that the poison must have been self-administered. The second point was, that the purchases of arsenic which the prisoner was proved to have made were intended for cosmetic purposes.

The idea of using arsenic as a cosmetic takes us almost unconsciously back to the beginning of the eighteenth century, when an old hag, named Toffania, of Naples, was strangled for having directly or indirectly been the cause of poisoning more than six hundred persons. The poison which she prepared was proved to be merely a solution of salts of arsenic, and this preparation was found to be in circulation throughout Italy under the assumed name, for secrecy, of a famous oil, supposed to possess miraculous healing properties. Any one in the secret could buy the poison under the guise of using it as any liniment or cosmetic might be used, while under its cover lay death to the victim in a day, week, or month, at the will of the administrator.

Strange as it may appear, national crime like

this seems very much to have run in cycles in some continental countries; and although our own country has been free from it in such gigantic proportions, it has not altogether been so free from the crime of murder as not to make us thankful that modern investigation has rendered the perpetration of such villainy almost impossible. Every murder of modern times has but made the perpetration of future murder less easy; and the very ingenuity of counsel in their defence of such cases has only assisted to this end, by exposing all the weaker points for the future guidance of the public prosecutor. Were proof of this needed, it is only necessary to point out that some of the most notorious crimes of modern times have been committed with the most subtle and powerful of all known poisons, and directed with a skill and ability which could only proceed from a trained and scientific acquaintance with the substance used. What, however, has been the result? Strychnine in the hands of Dr Palmer, tartar emetic in that of Dr Pritchard, and aconitine in that of Dr Lamson, too certainly accomplished the purpose for which they were intended; but with all the ingenuity and skill and opportunity at their disposal, they could not escape the fruits of their villainy. Their history is a striking proof of the fact, that if modern discovery has given the agents for perpetrating crime, it has no less yielded the means for their scientific detection.

Not the least interesting of many curious features connected with the production and consumption of certain poisons is the extraordinary quantities that are in some instances manufactured. What becomes of them? It is comparatively easy to understand what is implied by one thousand Winchester quarts of chloroform, and one thousand or even ten thousand ounces of morphia; but what of a poison like chloral? It has already been stated that chloral is at present being manufactured by the hundredweight. This, however, as a matter of fact, falls far short of the reality, as one German manufacturer recently admitted the production of half a ton weekly in his laboratory alone. There is no recognised outlet for the consumption of this substance saving that of internal administration, and we confess the imagination gets baffled in endeavouring to estimate the hundreds of thousands of pain-stricken, weary mortals who must swallow an indefinite number of half-tons weekly, in doses of twenty or thirty, or at the most forty grains each. A number of years ago, something little short of a panic was occasioned by attention having been called to the fact that strychnine was being manufactured in enormous quantities, one thousand ounces having been known to be purchased at one time. What became of this extraordinary quantity was the question that not unnaturally seized the public mind. As a medicine, its use is necessarily very limited; while its indiscriminate sale or employment as a destructive agent for vermin—the only other legitimate purpose to which it is known to be applied—is restricted by legislative enactment. In such circumstances, it was reasonable to seek some other explanation for its enormous production, and the public mind somewhat mysteriously fixed upon *beer* as being the medium. For a time, it was currently believed that the bitter principle of the hop was substituted, or at least fortified, by the help of strychnine; and although this was ultimately disproved, the mystery of the quantities in which it was being manufactured was only partially solved by the suggestion, that it was probably destined for the colonies, to assist in exterminating vermin there.

Still another curious fact remains to be noticed in connection with strychnine—the frequency with which it has been found in admixture with another neutral principle called santonine. Santonine is derived from the seeds of the *Artemisia santonica* (wormseed), and is much used in medicine as a simple vermifuge, particularly for children. It will therefore be at once understood that a mixture of the two substances means death to any one getting such a dose; and as a matter of fact, deaths have occurred in our own country, in France, Spain, Germany, and in America, from this extraordinary cause. It will be kept in mind that we do not speak at present of a simple case of substitution, in which the doctor or the druggist lifts and dispenses from the wrong bottle. Deaths, unfortunately, have occurred in this way also; but, generally speaking, there is no mystery whatever about such cases. The mystery we refer to is, that santonine, which undoubtedly has been in the first instance derived from various sources, extending over a period of years, and in the experience of various nationalities, has been proved to be mixed with strychnine. Various suggestions and theories have been put forth to account for the fatality, and amongst others the probability that the santonica seeds may have been adulterated by other seeds resembling them, but strychnine-yielding; and also that the cases of poisoning narrated were not caused by strychnine, but were actually produced by an overdose of santonine itself, acting on some peculiar idiosyncrasy of the constitution. This last suggestion is at once met by the direct fact, that strychnine was not only discovered in the majority of instances, on a post-mortem examination being made, but its source was also traced, and, in every case the mixture as stated, satisfactorily proved. As to the other theory, the mixture of seeds, granting that the same process which extracts the santonine from the santonica would also extract the strychnine from the strychnos, it is hardly conceivable that the adulteration would escape the notice of the different manufacturers; far less would it be possible, even if it did, to produce a simple *mixture* of crystals, such as appears to have been characteristic of these fatalities. In the process of crystallisation, the two substances would not have crystallised separately to form a mixture, but would have blended together to form a distinct and uniform crystal. The more probable explanation is, that a distant resemblance both in the spelling and pronouncing of the two names, favoured by a similarity in their physical appearance, has led to some confusion at one point or another, whereby the one has been accepted for the other. Still, even with this explanation, it remains a curious fact, that the error has so frequently repeated itself both in this and other countries.

Mistakes of any kind with poisons will almost always lead to results more or less serious, as well as mysterious, if not detected in time. The dismay, for example, that was caused five or six

years ago by numerous fatalities from the use of a dusting powder largely adulterated with arsenic must still be fresh in the memory of every one. Fifteen children died from arsenical poisoning produced by the use of this powder, and while, fortunately, its supply was distinctly and quickly traced to its source, and its use confined to a comparatively limited area, the mystery, we believe, has never been explained as to how the arsenic was substituted for *terra alba*, which it was sold as, and supposed to be, or how it came to be supplied in such large quantity without detection in some manner or other.

Equally serious and still more mysterious was a case that happened in a madhouse in the Southern States of America with aconitine, shortly after this powerful agent had been brought prominently into note in connection with the trial of Lamson. The medicines—in this instance all simple, it appears—were given to the patients of the asylum in open dishes carried on trays; and whilst the trays were waiting for the nurses to take them to their different wards, it is thought some one must have tampered with them. Within a few minutes after the medicines had been taken, the patients complained of the effects; and within ten minutes several had died, whilst other two died after two hours, and another still after two days. Post-mortem examinations discovered the presence of aconitine in considerable quantity, and some of it in the crystalline form. The fatal results could not be attributed to any of the ordinary preparations of aconite; while, to add to the mystery, aconitine was unknown in the laboratory of the asylum, neither was it kept in stock by any chemist in the town. Anything more fiendish than this, if done intentionally, can scarcely be conceived. It opens up, however, a question which has often forced itself upon the writer as a probable solution of some unexplained and apparently unexplainable crimes. Has the secret possession of or the power of obtaining such powerful agents as those we have been speaking of, not a tendency to act on certain morbid minds, instigating to the perpetration of crime? Every one has read of the impulse which seizes some individuals on looking over any huge precipice, to cast themselves headlong from it. The impulse is described in some instances as being awful in its intensity. Is it not possible that certain individuals may thus also be acted upon to commit some fearful crime, when possessed of the means to do so? Read in this light, some historical crimes become intelligible, at least in so far as supplying the link that is so often awanting as to their cause—namely, motive.

A HOUSE DIVIDED AGAINST ITSELF.

BY MRS OLIPHANT.

CHAPTER XXXIX.

And Constance, too, had found it amusing; she did not hesitate to acknowledge that to herself. She had got a great deal of diversion out of these six weeks. There had been nothing, really, when you came to think of it, to amuse anybody: a few dull walks; a drive along the dusty roads, which were more dusty than anything she had ever experienced in her life; and then a ramble among the hills, a climb from terrace to terrace of the olive gardens, or through the stony streets of a little mountain town. It was the contrast, the harmony, the antagonism, the duel and the companionship continually going on, which had given everything its zest. The scientific man with an exciting object under the microscope, the astronomer with his new star pulsing out of the depths of sky, could scarcely have been more absorbed than Constance. Not so much; for not the most cherished of starfishes, not the most glorious of stars, is so exciting as it is to watch the risings and flowings of emotion under your own hand, to feel that you can cause ecstasy or despair, and raise up another human creature to the heights of delight, or drop him to depths beneath purgatory, at your will. When the young and cruel possess this power—and the very young are often cruel by ignorance, by inability to understand suffering—they are seldom clever enough to use it to the full extent. But Constance was clever, and had tasted blood before. It had made the time pass as nothing else could have done. It had carried on a thread of keen interest through all these commonplace pursuits. It had been as amusing, nay, much more so than if she had loved him; for she got the advantage of all his follies without sharing them, and felt herself to stand high in cool ethereal light, while the unfortunate young man turned himself outside in for her enlightenment. She had enjoyed herself. She did not deny it; but now there was the penalty to pay.

He was gone, clean gone, escaped from her power; and nothing was left but the beggarly elements of this small bare life, in which there was nothing to amuse or interest. The roads were more dusty than ever, lying white in heat and dust, which rose in clouds round every carriage—carriage! that was an euphemism—cab which passed. The sun blazed everywhere, so that one thought regretfully of the dull skies of England, and charitably of the fogs and rains. There was nothing to do but to go up among the olives and sit down upon some ledge and look at the sea. Constance did not draw, neither did she read. She did nothing that could be of any use to her here. She regretted now that she had allowed herself at the very beginning to fall into the snare of that amusement, too ready to her hand, which consisted of Captain Gaunt. It had been a mistake, if for no other reason, at least because it left the dullness more dull than ever, now it was over. He it was who had been her resource, his looks and ways her study, the gradual growth of his love the romance which had kept her going. She asked herself sometimes whether she could possibly have done as much harm to him as to herself by this indulgence, and answered earnestly, No. How could it do him any harm? He was vexed, of course, for the moment, because he could not have her; but very soon he would come to. He would be a fool, more of a fool than she thought him, if he did not soon see that it was much better for him that she had thought only of a little

amusement. Why should he marry, a young man with very little money? There could be no doubt it would have been a great mistake. Constance did not know what society in India is like, but she supposed it must be something like society at home, and in that case, there was no doubt he would have found it altogether more difficult, had he gone back a married man.

She could not think, looking at the subject dispassionately, how he could ever have wished it. An unmarried young man (she reflected) gets asked to a great many places, where the people could not be troubled with a pair. And whereas some girls may be promoted by marriage, it is *almost always* to the disadvantage of a young man. So, why should he make a fuss about it, this young woman of the world asked herself. He ought to have been very glad that he had got his amusement and no penalty to pay. But for herself, she was sorry. Now he was gone, there was nobody to talk to, nobody to walk with, no means of amusement at all. She did not know what to do with herself, while he was speeding to dear London. What was she to do with herself? Filial piety and the enjoyment of her own thoughts—without anything to do even for her father, or any subject to employ her thoughts upon—these were all that seemed to be left to her in her life. The tourists and invalids were all gone, so that there was not even the chance of somebody turning up at the hotels; and even the Gaunts—between whom and herself there was now a gulf fixed—and the Durants, who were bores unspeakable, were going away. What was she to do?

Alas, that exhilarating game which had ended so sadly for George Gaunt, was not ending very cheerfully for Constance. It had made life too tolerable—it had kept her in a pleasant self-deception as to the reality of the lot she had chosen. Now that reality flashed upon her—nay; the word is far too animated; it did not flash, nothing any longer flashed, except that invariable, intolerable sun—it opened upon her dully with its long, long, endless vistas. The still rooms in the Palazzo with the green *persiani* closed, all blazing sunshine without, all dead stillness and darkness within—and nothing to do, nobody to see, nothing to give a fresh turn to her thoughts. Not a novel even! Papa's old books upon out-of-the-way subjects, dreary as the dusty road, endless as the uneventful days—and papa himself, the centre of all. When she turned this over and over in her mind, it seemed to her that if, when she first came, instead of being seduced into flowery paths of flirtation, she had paid a little attention to her father, it might have been better for her now. But that chance was over, and George Gaunt was gone, and only dullness remained behind.

And oh, how different it must be in town, where the season was just beginning, and Frances, that little country thing, who would care nothing about it, was going to be presented! Constance, it is scarcely necessary to say, had been told what her sister was to wear; indeed, having gone through the ceremony herself, and knowing exactly what was right, could have guessed without being told. How would Frances look with her little demure face and her neat little figure? Constance had no unkindly feeling towards her sister. She fully recognised the advantages of the girl, who was like mamma; and whose youthful freshness would be enhanced by the good looks of the little stately figure beside her, showing the worst that Frances was likely to come to, even when she got old. Constance knew very well that this was a great advantage to a girl, having heard the frank remarks of society upon those beldams who lead their young daughters into the world, presenting in their own persons a horrible caricature of what those girls may grow to be. But Frances would look very well, the poor exile decided, sitting on the low wall of one of the terraces, gazing through the gray olives over the blue sea. She would look very well. She would be frightened, yet amused by the show. She would be admired—by people who liked that quiet kind. Markham would be with them; and Claude, perhaps Claude, if it was a fine day, and there was no east in the wind! She stopped to laugh to herself, at this suggestion, but her colour rose at the same time, and an angry question woke in her mind. Claude. She had told Mrs Gaunt she was engaged to him still. Was she engaged to him? Or had he thrown her off, as she threw him off, and perhaps found consolation in Frances? At this thought, the olive gardens in their coolness grew intolerable, and the sea the dreariest of prospects. She jumped up, and notwithstanding the sun and the dust, went down the broad road, the old Roman way, where there was no shade nor shelter. It was not safe, she said to herself, to be left there with her thoughts. She must break the spell or die.

She went, of all places in the world, poor Constance! to the Durants in search of a little variety. Their loggia also was covered with an awning; but they did not venture into it till the sun was going down. They had their tea-table in the drawing-room, which, till the eyes grew accustomed to it, was quite dark, with but one ray of subdued light stealing in from the open door of the loggia, but the blinds all closed and the windows. Here Constance was directed, by the glimmer of reflection in the teapot and china, to the spot where the family were sitting, Mrs Durant and Tasie languidly waving their fans. The *dolce far niente* was not appreciated in that clerical house. Tasie thought it her duty to be always doing something, knitting at least for a bazaar, if it was not light enough for other work. But the heat had overcome even Tasie; though it could not, if it had been tropical, do away with the little furnace of the hot tea. They all received Constance with the languid delight of people in an atmosphere of ninety degrees, to whom no visitor has appeared, nor any incident happened all day.

'Oh, Miss Waring,' said Tasie, 'we have just had a great disappointment. Some one sent us the *Queen* from home—and we looked directly for the drawing-room, to see Frances' name and how she was dressed; but it is not there.'

'No,' said Constance; 'the 29th is her day.'

'Oh, that is what I said, mamma. I said we must have mistaken the date. It couldn't be that there was any mistake about going, when she wrote and told us. I knew the date must be wrong.'

'Many things may occur at the last moment

to stop one, Tasie. I have known a lady with her dress all ready laid out on the bed, and circumstances happened so that she could not go.'

'That is by no means a singular experience, my dear,' said Mr Durant, who in his black coat was almost invisible. 'I have known many such cases; and in matters more important than drawing-rooms.'

'There was the Sangazures,' said the clergyman's wife—'don't you recollect? Lady Alice was just putting on her bonnet to go to her daughter's marriage, when'——

'It is really unnecessary to recall so many examples,' said Constance. 'No doubt, they are all quite true; but as a matter of fact, in this case the date was the 29th.'

'Oh, I hope,' said Tasie, 'that somebody will send us another *Queen;* for I should be so sorry to miss seeing about Frances.—Have you heard, Miss Waring, how she is to be dressed?'

'It will be the usual white business,' said Constance calmly.

'You mean—all white? Yes, I suppose so; and the material, silk or satin, with tulle? O yes, I have no doubt; but to see it all written down, with the drapings and *bouillonnés* and all that, makes it so much more real. Don't you think so? Dear Frances, she always looked so nice in white—which is trying to many people. I really cannot wear white, for my part.'

Constance looked at her with a scarcely concealed smile. She was not tolerant of the old-young lady, as Frances was. Her eyes meant mischief as they made out the sandy complexion, the uncertain hair, which were so unlike Frances' clear little face and glossy brown satin locks. But fortunately, the eloquence of looks did not tell for much in that closely shuttered dark room. And Constance' nerves, already so jarred and strained, responded with another keen vibration when Mrs Durant's voice suddenly came out of the gloom with a bland question: 'And when are you moving? Of course, like all the rest, you must be on the wing.'

'Where should we be going? I don't think we are going anywhere,' she said.

'My dear Miss Waring! that shows, if you will let me say so, how little you know of our climate here. You must go: in the summer, it is intolerable. We have stayed a little longer than usual, this year. My husband takes the duty at Homburg every summer, as perhaps you are aware.'

'Oh, it is so much nicer there for the Sunday-work,' said Tasie; 'though I love dear little Bordighera too. But the Sunday-school is a trial. To give up one's afternoons and take a great deal of trouble for perhaps three children!—Of course, papa, I know it is my duty.'

'And quite as much your duty, if there were but one; for, think if you saved but one soul. Is that not worth living for, Tasie?' Mr Durant said.

'O yes, yes, papa. I only say it is a little hard. Of course, that is the test of duty.—Tell Frances, please, when you write, Miss Waring, there is to be a bazaar for the new church; and I daresay she could send or do me something. Two or three of her nice little sketches. People like that sort of thing. Generally, things at bazaars are so useless. Knitted things, everybody has got such shoals of them; but a water-colour—you know that always sells.'

'I will tell Fan,' said Constance, 'when I write—but that is not often. We are neither of us very good correspondents.'

'You should tell your papa,' went on Mrs Durant, 'of that little place which I always say I discovered, Miss Waring. Such a nice little place, and quite cool and cheap. Nobody goes; there is not a tourist passing by once in a fortnight. Mr Waring would like it, I know.—Don't you think Mr Waring would like it, papa?'

'That depends, my dear, upon so many circumstances over which he has no control, such as, which way the wind is blowing, and if he has the books he wants, and'——

'Papa, you must not laugh at Mr Waring. He is a dear. I will not hear a word that is not nice of Mr Waring,' cried Tasie.

This championship of her father was more than Constance could bear. She rose from her seat quickly and declared that she must go.

'So soon?' said Mrs Durant, holding the hand which Constance had held out to her, and looking up with keen eyes and spectacles. 'And we have not said a word yet of the event and all about it, and why it was. But I think we can give a guess at why it was.'

'What event?' Constance said with chill surprise—as if she cared what was going on in their little world!

'Ah, how can you ask me, my dear? The last event, that took us all so much by surprise. I am afraid, I am sadly afraid you are not without blame.'

'O mamma! Miss Waring will think we do nothing but gossip. But you must remember there is so little going on, that we can't help remarking—— And perhaps it was quite true what they said, that poor Captain Gaunt'——

'Oh, if it is anything about Captain Gaunt,' said Constance, hastily withdrawing her hand; 'I know so little about the people here'——

Tasie followed her to the door. 'You must not mind,' she said, 'what mamma says. She does not mean anything—it is only her way. She always thinks there must be reasons for things. Now I,' said Tasie, 'know that very often there are no reasons for anything.' Having uttered this oracle, she allowed the visitor to go downstairs.—'And you will not forget to tell Frances,' she said, looking over the balustrade. In a little house like that of the Durants, the stairs in England would have been wood, and shabby ones; but here they were marble, and of imposing appearance. 'Any little thing I should be thankful for,' said Tasie; 'or she might pick up a few trifles from one of the Indian shops; but water-colours are what I should prefer.—Good-bye, dear Miss Waring. Oh, it is not good-bye for good; I shall certainly come to see you before we go away!'

Constance had not gone half-way along the Marina when she met General Gaunt, who looked grave, but yet greeted her kindly. 'We are going to-morrow,' he said. 'My wife is so very busy, I do not know if she will be able to find time to call to say good-bye.'

'I hope you don't think so badly of me as she does, General Gaunt?'

'Badly, my dear young lady! You must know that is impossible,' said the old soldier, shuffling a little from one foot to the other. And then he added: 'Ladies are a little unreasonable. And if they think you have interfered with the little finger of a child of theirs—— But I hope you will let me have the pleasure of paying my farewell visit in the morning.'

'Good-bye, general,' Constance said. She held her head high, and walked proudly away past all the empty hotels and shops, not heeding the sun, which still played down upon her, though from a lower level. She cared nothing for these people, she said to herself vehemently, and yet the mere feeling of the farewells in the air added a forlorn feeling to the stagnation of the place. Everybody was going away except her father and herself. She felt as if the preparations and partings, and all the pleasure of Tasie in the 'work' elsewhere, and her little fussiness about the bazaar, were all offences to herself, Constance, who was not thought good enough even to ask a contribution from. No one thought Constance good for anything, except to blame her for ridiculous impossibilities, such as not marrying Captain Gaunt. It seemed that this was the only thing which she was supposed capable of doing. And while all the other people went away, she was to stay here to be burned brown, and perhaps to get fever, unused as she was to a blazing summer like this. She had to stay here, she, who was so young, and could enjoy everything, while all the old people, to whom it would not matter very much, went away. She felt angry, offended, miserable, as she went in and got herself ready mechanically for dinner. She knew her father would take no notice, would probably receive the news of the departure of the others without remark. He cared nothing, not nearly so much as about a new book. And she, throbbing with pain, discomfiture, loneliness, and anger, was alone to bear the burden of this stillness and of the uninhabited world.

OLD TINDER-BOXES.

BY AN OLD FOGEY.

THOSE who have seen, in old Rome, that beautiful little circular gem of pagan architecture called the Temple of Vesta, will remember with what reverence the sacred fire was guarded there, how that the priestesses who presided over it were appointed for thirty years; and how that if, by any mischance, the fire went out, it could never be relighted except by the rays of the sun itself.

Reader, do you remember the old-fashioned tinder-boxes, from which our fathers and our grandfathers obtained their lights and their fires? If not, you cannot be so old as I am, for I remember them well; but only half a century has gone since then. The idea of getting light and fire out of a box! Let us recall the value of the sacred fire, and think of the said vestal virgins guarding it so assiduously two thousand years ago, and we need not turn up our noses, even if we have to get fire from a tinder-box. Nowadays, we have come to look upon fire and light as the commonest of common things, the common wealth of the world, and forget the difficulty of producing them in olden days by the attrition of pieces of dry wood—a tedious operation—or by the use of flint and steel. This brings me to the use of the tinder-box when I was a boy, and probably in use in outside places at the present day.

It is somewhat of a puzzle to me how Robinson Crusoe first got the light and fire which roasted his kids and by which he read his Bible. Very likely he picked up a strike-a-light in the cabin of the doomed vessel; however, he seems to have lost it again; for after having made many fires and candles for years after the shipwreck, we read, that whilst exploring a certain grotto, he gave over the search for that time; 'but resolved to come again the next day provided with candles and a tinder-box, which I had made of the lock of one of the muskets, with some wild-fire in the pan.' Was this the tinder-box which he made when cast ashore amongst the wild animals of the famous island, or the result of a brilliant idea for lighting up the cavern he intended for an arsenal? Anyhow, the poor fellow had his flint and steel to make him comfortable, to fire off his fowling-pieces, to bring down the birds and the goats withal.

We are certainly much indebted to the bit of flint and steel in the old matchlock, the old fowling-piece, the old pistol, the old carbine; and who may say how much we owe to Blücher and the Guards and this identical steel and flint for the victory of Waterloo, certainly to some extent brought about by the tinder-box of our soldiers of yore—Defoe's 'old tinder-box, made out of a musket-lock, with some wild-fire in the pan.'

How rough and clumsy were the implements of warfare that depended on flint-locks, compared with our exquisite rifles and their compact cartridges. What an unsatisfactory contrivance on the whole was Defoe's 'musket-lock and steel pan,' and trigger with square flint, and the highwayman's deadly pistol, formed on the same principle, and which, if it did not level a man at one end, would assuredly do so at the other. After all, these weapons of our forefathers did much dreadful work surely, if slowly, sometimes.

During our last spring cleaning—popularly known as the 'spring fever'—I was rummaging in an old cellar, and turned up, amongst many relics of the 'good old times,' a certain japanned box, nine inches long by half as much broad. It contained a lot of small articles, notably a piece of steel with a handle like the crosier of a bishop; a match or two of rough deal splinters, cut to a point, and besmeared with brimstone; a piece of flint; and a bit of charred linen with a fusty smell. This linen was blackened by having been set on fire, and rapidly extinguished by putting a flat piece of lead upon it. This was the old tinder-box, from which many a good fire, which had cooked many a good dinner, had been lighted—from which the morning candle of merchants and tradesmen had been lit, and to which they owed much of their wealth.

It was so long since I had seen such a box, that I had much ado to remember how, when I was a boy, an old aunt of mine went down on her knees in the early winter morning, encouraging the kitchen fire to blaze by this round-about method of evolving light and fire for domestic purposes. The method was this, and a cold one it was on a frosty morning. The maid-servant having opened the shutters, knelt down—a very suitable position for dispensing 'sacred fire.' She opened the box, took the crosier in one hand, and the flint in the other; and by striking rapidly the one against the other, a spark sprang out upon the bit of burnt linen, technically called tinder. If the spark were fortunate, it caught hold of the fibres of linen, and set them aglow. Then the maid patiently watched the sacred fire run along the tinder whilst she blew it with her mouth, holding the brimstone match to it, till happily a blue flame resulted, from which she lighted her morning candle, and afterwards her fire. Then the tinder-box was closed. It had done its duty for another day.

I have often seen the operation performed, and have frequently collected nice pieces of flint from the outlying wolds, where it prevailed, to bring them home for the domestic tinder-box, or to give to less fortunate neighbours, who, like the unhappy virgins of old, had lost their light, for want of trimming, or who had mislaid the spark-producing mineral.

Considering all this had to be gone through every morning and everywhere, except where fires were kept alight all night, one looks back on those days with surprise. But then there was no other way. What would our young fellows with their pretty match-boxes think, if they had to light their cigarettes in this primitive style? There were no cigars lighted in the streets; all had to be done at the temple of light, the orthodox fire. There was no such thing as carrying fire in your waistcoat pocket, with a French picture and a hundred lights for a penny. In the times when the curfew rang at eight o'clock every night, for all good people to put out their lights and fires, what a fuss there must have been amongst the men and maidens bringing back light and fire from heaven to earth again. The world has spun round many times since then.

But the tinder-box died hard, and it was long before this means of evoking light was snuffed out altogether. The dear old tinder-box, how we ought to value it, as the precursor of all the cheap lights, and better, of the present hour. Let us hope that there may be a tinder-box placed in every antiquarian museum, to show unbelieving men what used to be, and to show also how much can be done in half a century in the way of lighting up an old world cheaply and effectually.

It was reserved for England to abolish the tinder-box and make the match of the future. She has given us an easy and cheap means of producing light, which will last us till the 'crack of doom.' All sorts of things were tried before the right idea was hit upon, but it came at last. At one time we used the old phosphorus bottle, and I remember well how a distinguished friend and myself nearly set a house on fire during the composition of one of these bottles, intended to light a match by simply inserting it therein and withdrawing it for the atmospheric air to act upon it. A sudden flame was the inevitable result.

After the match-bottle period came long tiresome trials of rubbing prepared matches between pieces of sand-paper. This was a great improvement on the old plan, for a candle could be lighted in the middle of the night without inconvenience. The tinder-box and strike-a-light were now doomed. Every smoker had his tobacco-box rigged out with sand-paper strip and pasteboard match. For a change, the tobacconists introduced the German tinder. It would not blaze like the ruder match, but would light a cigar or a pipe very satisfactorily. Then came the red-tipped fusees, which were broken off the brown pasteboard as occasion required. These were a cleanly and useful invention, and served the use of the public for many years. They had a great run, and were a veritable success. But the world was taken by storm when some genius introduced the wax taper known as a vesta match, a marvel of 'sweetness and light,' so daintily made—about an inch in length, one might apply the words of Hood to it:

> Fashioned so slenderly,
> Young and so fair,

with its brown-tipped waxen fibres, no thicker than whipcord. Was there ever a brighter idea? And it holds good to this hour. It ought to have made the fortune of the inventor, and perhaps did so. It was the outcome of a great thought—a scintillation, something like what Byron or Goethe would have given mankind if they had dabbled in chlorate of potash and phosphorus.

After this splendid addition to public utility, with a tiny box to strike the light upon, there came a host of claimants, and the fully developed lucifer-match for ordinary uses, the making of which employs so many hands, and requires such large manufacturing appliances in our large towns. In the way of merchandise and the introduction of a new trade, as well as in personal comfort, what a chasm has been bridged over since the time of the obsolete tinder-box! Matches that strike in their own way, on their own box; vesuvians, and fusees, highly odoriferous, that deal out light with the persistence of a November squib or a rocket; Limited Liability Companies for match-making! And not only have lucifer-matches introduced a new trade, but the manufacture of boxes to contain them has created a new industry. In almost every shop-window you see some device for retaining the precious match—in German or real silver, in papier-mâché, in pasteboard, wood, or copper, in tin or leather, or iron or china. There are all sorts of contrivances: boxes, in animal and bird forms, and illimitable vases, all containing the ubiquitous little match for boudoir and bedroom, and pocket and mantel-shelf. The French and Italians are not behind us in pretty designs—in fact, their boxes are almost unique, with their self-acting springs, and bright little pictures of groups and familiar scenery.

Only think of the comfort of these compact, well-filled boxes going the tour of the world by

the ton, joy-producers and light-carriers to the ends of the earth. They illuminate town and jungle and bush, caves and tunnels and mountains, marts and churches, railways and steamers —every spot except the bottom of a coal-mine, where even their tiny mightiness might put in action all the forces of nature, and blow up mine, minerals, and men. Shall we imperil our safety by all this luminosity and pyrotechny? No; we cannot now dispense with these valuable aids to light and convenience. Perhaps the future may produce greater wonders as light-givers; but alongside the old tinder-box in the museum, let us place the vesta taper, the vesuvian fuse, and the common striking-match yclept lucifer, just to show what modern science, as opposed to the science of old days, can accomplish when it takes a thing in hand. We have well-nigh forgotten the old light, and have got the new one, that despises flint and sand-paper and steel; and there is no fear that we shall play with the fire and the light until we tire or burn our fingers, or that we shall ever wish ourselves back amongst the glooms of the old tinder-box.

THE STUPID COUPLE.

AN EPISODE OF THE ATLANTIC.

'THE STUPID COUPLE'—at least that was what the other passengers called them during the first few days of the voyage, after the ship had sailed from Queenstown. Not that they were so very stupid either, but people readily get nicknames on board a vessel, and a nickname once acquired is apt to stick.

John Pierrepoint and his wife had come on board the *Shasta* at Queenstown by the last tender a few minutes before the propeller commenced to revolve slowly, and they had not yet found their stateroom, when the signal, 'Full speed ahead,' passed from the bridge to the engine-room; and the throbbing of the great engines told all old travellers that their voyage was commenced in earnest, and that, till the ship entered New York harbour, the engines would not rest for a moment from their work of driving the great ship on. The saloon of the *Shasta* was quite full of cabin passengers, and she had many steerage and second-cabin passengers as well. She was the largest and newest ship of the line, and was commanded by the Company's commodore, Captain Hood, a general favourite, and known among old travellers to and from America as the luckiest skipper that had ever sailed the Atlantic. Perhaps it was because there were so many of these seasoned travellers, wise in the ways of steamers, on board, that John Pierrepoint and his wife seemed to be particularly inexperienced in travel, and therefore deserving of being called stupid; they must certainly never have taken a long voyage before; they showed no disposition to struggle for what some thought the best seats at table, and they accepted without a grumble the stateroom assigned to them, which was one of the smallest in the ship. In fact, they were too easily satisfied. The Pierrepoints were reserved because they knew no one on board; but this seemed to give them no concern, they being perfectly satisfied with their own society. Many of the American families and other passengers had known each other at home or had met before, either in other ships or travelling about in Europe, and were like a large party of old friends.

This journey in autumn to America was what the Pierrepoints called their wedding trip; but it was a long deferred one, for they had been married nearly six years, and had left three little children at home in careful hands. Before they were married, they had really settled to go to America for their wedding trip; but just then Mr Pierrepoint had inherited a property, and each year afterwards something had happened to prevent their plan from being carried out.

The weather was splendid out in the Atlantic. The ocean had its long low roll, sometimes showing a ripple where the wind touched it tenderly, and sometimes crisped by a light breeze, which generally died away at sunset, and each day the voyagers saw a red sun sinking into the water right ahead. At length, one afternoon, the voyage was half over—mid-Atlantic had been reached. Pierrepoint and his wife were far aft on the poop, close to the rail, he reading, and she knitting, as their custom was. She is a fair gracious woman, with gray eyes and squirrel-coloured hair, perhaps about twenty-five years of age. He is a long-limbed, well-knit fellow of thirty, deep-chested and lean, black-haired, with a crisp beard and tawny skin. He is dressed in one of his old white flannel cricketing suits, with a hat of the same stuff. People wore pretty much what they liked on deck, and this was John Pierrepoint's fancy; while some of the other gentlemen, with tall hats, glorious scarfs, diamond pins, and everything else to match, endeavoured by their dress to fascinate the ladies, who were sitting, or walking about the deck, in all the brilliant colours of a flower-garden.

There was one passenger who attracted more attention than any other, and this was not a young lady, nor a gentleman with a diamond pin; he was simply a little boy of eight; but then he was Captain Hood's son, and every one wished to be friendly with him and to amuse him. He had made friends of all the passengers, and was quite at home on board, and now was running to and fro on the poop among the groups of ladies and gentlemen, rolling a great coloured ball of hollow india-rubber.

Captain Hood's home was on the Hudson, a few miles from New York city. His elder children were girls, and little Jack was his only son. It had been an old promise, that as soon as Jack was eight years of age, his father was to take him a voyage to England and back; indeed, from the time that Jack was four years old, he had talked about this great treat he was to have; and in the meantime his interest in nautical matters grew large by watching the craft of all kinds passing up and down the Hudson, right in front of the windows of their house. When the time came, and Captain Hood

saw he could take Jack over, his mother was very unwilling to let him go; she feared some harm might happen to him, and raised all the difficulties and objections she possibly could; but Jack and his father carried the day. The first eastward run of the *Shasta* was a chance not to be missed; and the weather was very fine, and settled. Mrs Hood with her daughters came down to the wharf at New York to see the steamer off. Her last words to her husband were: 'Remember, if you don't bring Jack safe home, you needn't come without him.' The captain remembered these words later. He replied: 'All right, little woman; we'll be back with you for breakfast some fine morning in less than five weeks.'

During the voyage to Liverpool, all went well. The chief stewardess took Jack under her special care, and he slept in her cabin. While the ship was in the Mersey, Jack and his friend the stewardess went to stay at a farm in Lancashire, and only came down a day or two before the steamer sailed on her present voyage. The boy was now quite accustomed to life on board a steamer, and went where he liked all over the ship; the bridge and the steerage were the only forbidden places. He had become quite friendly with many of the sailors; and he had not the least objection to a confidential chat with some of the grimy and half-naked stokers, most of them Irishmen, who came up on deck when they could, from the depths of the stoke-hole, to get a breath of fresh air. The solemn old Scotch engineer was his particular favourite.

On this very day, when the voyage was supposed to be half over, and before the passengers came on deck to enjoy the evening sun, the conversation at dinner had turned upon the subject of persons falling overboard from a ship going fast, and the chances of saving them. Various persons at the table told their experiences of such matters; and after a little while, it seemed that the passengers who were joining in the discussion had formed themselves into two parties, one of which, comprising chiefly the landsmen and younger travellers on board, seemed to hold the opinion that it was a simple enough matter to pick a person up who had fallen over in daylight and in fine weather. 'If he can swim,' they said, 'he can keep himself up till a boat is lowered and rows to him. If he can't swim, some one who can, jumps overboard, and holds him up till both are rescued. Or a life-buoy is thrown to him, and that keeps him up.' But they had to admit that they had never seen this done.

The other party at table, headed by some captains of ships who were passengers by the *Shasta*, and some of the older travellers, were of a different opinion. They said that help almost always came too late; and that no matter how quickly a boat is lowered, the person who has fallen over is left so far astern that he sinks before he can be found—that, from a boat, it is very difficult to see such a small object as a man's head among the hollows of the waves, and this even in fine weather and with good light. If a man is a very good swimmer and has presence of mind, he has some chance, for he can keep himself up a long time; and if a boat is sent after him, he can call to it, or signal it, when he happens to rise on a wave at the same time that the boat rises.

One skipper told a story, which, however, did not relate to a man. He said: 'When I was homeward-bound from India last time, the first mate had a splendid large cockatoo, a great pet, and so tame that he would sit on your finger. Well, one day he flew overboard and settled down on the water astern. We had just come into the north-east trades, and were going about six knots. I threw all sails aback as soon as I could, and sent some hands in our quarter-boat after the bird. It took ten minutes or a quarter of an hour to get the boat out, and all the time I kept my eye on the bird; and when the boat was off, I went up into the mizzen rigging and watched the poor cockatoo for a long time; but the men in the boat couldn't find it; and we could not succeed in directing them to where it was. They came back without it.'

Another captain said: 'When I was in a steamer, I always kept one boat ready for lowering, with cover off and oars and all in her; but it takes you to be very quick to pick a man up who has fallen over. Many sailors can't swim, and then of course they go to the bottom at once.'

Shortly after this, the passengers came on deck. They did not know that, this day, the thing they had been talking about was to be enacted before their eyes.

Jack Hood was rolling his great ball and rushing about after it screaming with delight, when suddenly, after a strong throw, it fell on the rail, and then, with a bound, into the sea. The child stood still with amazement for a second; and then, running to where his ball had disappeared, he climbed on the rail to see what had become of it; and before any hand could reach him, he had fallen over into the waves. The terrified passengers saw him rise to the surface and stretch out his arms, while the seething foam from the ship's propeller turned him round and round in the water, and the ship rushed on, leaving him behind. The Pierrepoints were not very near the place where little Jack fell over; they were at the other side of the deck; but Mrs Pierrepoint, when she saw him climbing, laid her hand quickly on her husband's shoulder. He looked up instantly, and following her eyes to the spot, saw the boy just as he fell. In one moment he was on his feet, kicked off his canvas shoes, threw his hat on the deck, and turning his face towards the bridge, where he knew some of the ship's officers were always stationed, he called out in a voice which rang like a trumpet-call over the ship, 'Man overboard!' Then, with a quick run and leap, he had cleared the rail, and the broken twisting water of the ship's track had closed over him. He was on the surface again in a moment, and, taking a glance back at the ship, to know his position, stretched out into a long steady stroke in the direction where he knew the child was.

Great confusion and excitement fell upon the passengers, but not upon the officers of the ship. Captain Hood was standing on the bridge talking to the second officer, when he heard the cry of 'Man overboard!' He looked aft, and saw a man disappearing over the stern; then

he saw in the steamer's wake two heads, one dark, and the other small and fair; and further away, floating high, the coloured ball. A sailor who was cleaning some brass-work near the stern, ran forward, calling out to the captain: 'Your son has fallen overboard, sir, and a passenger has jumped after him.' The captain's hand was on the engine-room telegraph, and down into the depths of the ship went the signals. The engineer and some of his subordinates were sitting about in front of the great engines, in the mixture of lamplight and dim daylight which pervades that region. Some of the men had stretched themselves out on the floor of checkered iron plates. It was an idle time. The engines were going full speed and working well; one man was telling a story, when, to the astonishment of them all, the telegraph bell rang, and the index, which pointed to 'Full speed ahead,' moved across the dial to 'Stand by.' There was a general cry of 'What's wrong?' The engineer was close to the wheel which controlled the engines, and his assistants stood by. Again the bell rang, and the index pointed to 'Stop.' The engines came to a stand, the revolutions of the propeller stopped, a strange quiet fell on the engine-room; and the tremor all over the ship ceased. They all watched the telegraph. The bell rang again, and the index moved to 'Astern—slow;' and again in a minute or two, to 'Half.'

The engineer now had time to speak: 'What's wrong on deck? One of you run up and bring down word quick.'

Mickey, a fireman, with bare feet and bare shoulders, was standing at the foot of the almost perpendicular iron ladder; and at the engineer's word, he ran up as nimbly as a monkey; but he did not return; and in a few minutes another man went up, who returned immediately, all breathless, and told the others what had occurred; and that he had seen the first messenger, Mickey, in the boat which had been sent off to the rescue. All who could then went up on deck, to see the result. The head-engineer would not quit his post. The reversing of the engines had now brought the steamer to a stand. The next signal came down, 'Slow;' and the good steamer moved slowly backwards on her track.

When the first alarm was given, and while the captain, who never lost his presence of mind for a moment, was communicating with the engine-room, he made a sign to the second officer, who called out: 'Man overboard! Stand by to lower away the gig.' The sailors who were on deck ran to obey this order. A boat's crew of four hands and a cockswain were at once ready. The boat was safely lowered, and the men were at their oars. Before she cast off, the cockswain cried: 'I want a man for the boat's bow.' Mickey the fireman waited for no orders, but laying hold of the ropes, swung himself over, and slid down into the bow of the boat, which at once rowed quickly away. Before it set off, Mrs Pierrepoint ran over to the side and threw down into the boat's stern the Scotch plaid on which her husband had been lying.

Mrs Pierrepoint was quite calm; but the other passengers seemed afraid to approach her; they did not know just what to say—whether to congratulate her on her husband's daring, or to condole with her upon his danger. Some of the ladies were in hysterics; all were watching with the greatest concern the course of the boat, and trying to make out the child and the swimmer among the waves far astern; for the steamer had run more than a quarter of a mile before the boat was ready to leave her.

The men in the boat rowed fiercely. The passengers could see the cockswain and the bowman standing up, trying to distinguish something where the waves lifted; but even with glasses, they could see nothing of the swimmer.

A famous general, who had marched with a great army to victory, was on board; he did not know the Pierrepoints; but he came up now to Mrs Pierrepoint, and holding his hat in his hand, said: 'Madam, your brave husband has done a noble act. It is grand to see such pluck and dash. I trust you will have him back soon. Will you come up on the bridge beside the captain, where you can have a much better outlook over the sea; and perhaps you will make use of my binocular?'

'Oh, thank you,' she said. 'I shall be glad to have your glass, and to go on the bridge—if the captain allows me,' she added, smiling. 'But I don't think my husband is in danger; he has often been a long time in the water, and can swim well in his clothes. There is still plenty of light for the boat to find him. I only hope he may catch that dear little child in time. The boat should reach them soon.'

The general led Mrs Pierrepoint up to the bridge, and said a word to the captain. The captain at once came over, saying: 'The boat is close to them now; I saw them less than a minute ago through my glass on the top of a wave.'

'Do you see them? Are they together?' asked Mrs Pierrepoint.

'Yes,' replied the captain; 'I believe they are.' But his voice was now broken, and he took hold of Mrs Pierrepoint's hand. 'I watched my child from here, with the glass, till at last he floated so low that I could scarcely see him; and just as he seemed sinking, your husband dashed across the spot where he was, and I saw by a wave of his hand towards the ship that he had caught him. He is now waiting for the boat. —What a splendid swimmer he is!'

'O yes; he is a good swimmer. I am so glad he was near,' said Mrs Pierrepoint.—'I believe, captain, he will bring back your little boy safe.'

When Pierrepoint sprang over, he had been so quick, that he was not very far from the child; but he knew that all depended on reaching him soon, and he could only see him now and then, when the waves lifted them both at the same time, but those glimpses gave him the direction; and without minding in the least the fact that the steamer was receding from him at the rate of fifteen miles an hour, and that he was left alone in the middle of the great Atlantic with no one near him but a little sinking child, he swam on as quickly as possible, saw the child on the side of a wave, made a dash at him, and caught him by the arm as he was sinking. Jack's fears had got the better of him; he had given up hope; but now he roused up, and with a cry, caught John Pierrepoint's beard.

Pierrepoint raised the child's head as far as he dared, and placed his little cheek against his own, while passing his left arm round Jack's waist. Jack began to recover from his fright, and as he had often bathed in colder water than this, he did not mind the sea so much, now that he had something to hold on to.

'Well, Jacky, how are you now, and what made you jump into the water?' asked Pierrepoint.

'Oh, take me back to papa—take me back to the steamer! Where is the steamer?'

'Now you must keep quiet, and not fret,' said Pierrepoint. 'We have just to wait here till we are sent for. Your father is sending a boat for us.—Are you cold, Jacky?'

'No; not very cold; but show me where the steamer is.'

'Well,' said Pierrepoint, 'rub the salt water out of your eyes against my cheek, and I'll turn round till we face the steamer; then, when we rise on the top of a wave, you must look quick.'

They looked; and there was the great steamer with her four masts and low red funnels, with clouds of white steam rushing out of her escape-pipes, as she lay almost stationary on the water about a quarter of a mile away.

Pierrepoint could see that the upper decks and bulwarks and the lower rigging were swarming with people; every one on board seemed to have come up. When they rose on the next wave, a great change had taken place for them—the sun had set. Pierrepoint saw it disappear as the wave lifted them, and the surface of the water became a dark gray; but the strong light still shone for a few seconds longer on the funnels and masts of the steamer.

Pierrepoint with his little burden floated so low that the men in the boat had not yet seen him; but he had seen the boat just as the sun disappeared, and now knew where to look for it. He pulled a white handkerchief out of his coat-pocket, and when they were on the top of a sea, he gave a shout and waved; but the call was unheeded; the sea sank from under them, and they were in the hollow before the boat had risen. The next time he succeeded. As the boat rose, the cockswain heard a call, and saw the swimmers on a wave. The boat's course was slightly altered, and in a few minutes the boat had them alongside.

All this time, Pierrepoint had been treading water quietly, only keeping a lookout, and encouraging Jack to keep up his heart; but Jacky could not have kept up much longer. The fright and cold were telling upon him, and as the boat came up, his big eyes closed, and his cheek dropped heavily against Pierrepoint's.

The cockswain now took charge of the situation. 'Don't be in a hurry, sir,' he called.—'How is the boy?'

'Oh, I think he is all right,' said Pierrepoint; 'he was quite lively a minute ago.'

The cockswain then called: 'Be careful now; steady, lads, there; be very careful. One of you catch the child by the arm, another of you lay hold of the gentleman.'

Pierrepoint had laid his hand lightly on the boat's gunwale and still held Jacky firmly. Mickey the fireman fastened his toes among the bottom boards of the boat, and stretching down till his face almost touched the water, caught little Jacky first by one arm and then by both, and with a dexterous twist raised him quietly from the water and laid him in the bottom of the boat. Two of the sailors then caught Pierrepoint by the shoulders and pulled him in; then they patted him on the breast and back, a way that sailors have of expressing sympathy and approval; and then they cheered and waved their caps towards the ship. The rowers again took their places, the boat was quietly turned, and the men rowed back towards the steamer.

Mr Pierrepoint and Mickey attended to the child. His colour now returned, and his eyes opened, and he sat up, the water running out of his linen clothes. Pierrepoint's eye now caught sight of his plaid lying in the boat, and he asked the cockswain to pass it to him.

'A lady threw it in as we were leaving,' the steersman said.

'O yes; I know very well who the lady was,' Pierrepoint replied. 'I wish I had her here just now to take care of the boy.' Then, seeing in what a womanly, gentle way Mickey was handling the child, he said: 'My black friend, I'll appoint you nurse, if Jacky does not mind the soot.'

Jacky looked up, and recognising the fireman as one of his friends, put his arms round his grimy neck.

'Sure, sir,' said Mickey, 'Master Jacky knows me quite well.'

'Then,' said Pierrepoint, 'pull off his wet clothes and roll him up in the plaid.'

This was done, and Jacky felt quite warm and dry. Mickey kept him on his knee, rolled up like a mummy.

One of the sailors handed Pierrepoint an old rough jacket, which he pulled on over his wet clothes.

The steamer had drifted round till her broadside was towards the boat, and therefore, as she could do nothing to lessen the distance, the men in the boat had to do the more rowing, and they got on but slowly, for the sea was a little rougher, and the light was going. The captain still stood on the *Shasta's* bridge, watching the boat through his binocular. He saw Pierrepoint and the boy pulled in, and then he could only see that the men seemed busy about something in the bottom of the boat; after that, he saw Pierrepoint sitting up, and a brown bundle in the fireman's arms. He knew this was his boy, rolled up in something; but he could not help questioning within himself whether his boy was coming back to him alive or dead.

Mrs Pierrepoint was still beside Captain Hood, and felt that she knew what was passing in his mind. The boat was now much nearer; they were both watching it intently, but the light was failing. At the same moment, they both saw Mr Pierrepoint stand up and wave his right hand in a peculiar way.

'That was a signal, madam; what does it mean?' asked the captain.

'Wait a minute till he repeats.—Yes; I see it plainly this time. He says, All well,' replied Mrs Pierrepoint.

These words were heard by some of the ship's officers and passengers who stood near, and they raised a cheer, which was taken up all over the deck, and passed across the water to the boat, which was getting near.

'Thank God!' said Captain Hood. 'We will soon have them on board again.' He then left the bridge in charge of the first officer, and went aft, accompanied by Mrs Pierrepoint, to the place where the gig would be brought on board. Here the quartermaster made a clear space on deck, and in the centre of the space stood the captain, Mrs Pierrepoint, and the stewardess. To her Mrs Pierrepoint said: 'Order a warm bath to be ready for the child;' and a steward was sent down to have this done.

The boat was now alongside under the davits; the oars were unshipped; the hooks of the lifting-tackle were fixed in the rings for raising the boat; all the hands but two climbed up the tackle ropes, to lighten the boat, and then a number of willing hands hauled away upon the tackle. The boat left the water, and mounted slowly high into the air till it was above the level of the ship's bulwarks; the davits were swung round, and the boat was gently lowered upon the deck. Then a mighty cheer burst out, hats and handkerchiefs were waved, and cheer upon cheer rang over the water.

Little Jack looked out of his plaid with a smile on his face, while Mickey handed his precious bundle into Captain Hood's arms; and in a few minutes more Jack was having a warm bath, under the superintendence of his friend the stewardess; and a little later he was in the saloon with dry clothes on, as merry as if nothing whatever had happened.

When Pierrepoint stepped on the deck, he took his wife's hand in his for a moment; and then a rush was made at him, and both his hands were shaken till he thought his arms would be pulled off; but the captain came on deck at once and bore him off to one of the bathrooms, where a warm bath awaited him. A steward brought him a supply of dry clothes; and in half an hour he was in the saloon, and had to undergo another course of hand-shaking.

The captain said all he had to say in a very few words, and with a hand-grasp which said more than words.

The 'stupid couple' were now the heroes of the ship; and when the *Shasta* arrived in New York harbour, John Pierrepoint managed, by the captain's help, to escape being interviewed by the reporters. The reporters, however, heard the story in all its details from the passengers and officers, and the Pierrepoints found themselves famous.

Before the passengers separated, such a number of invitations were offered to the Pierrepoints, that, had they been able, they might have spent a year or two in America merely paying visits. Some of these invitations they were able to accept.

Captain Hood carried them off at once to his house on the Hudson, where little Jack was the first to bring his mother an account of the event of the voyage.

The Pierrepoints returned to England for Christmas without any sea adventures; but before they had been two days in America, John Pierrepoint wrote to his father to tell of their safe arrival in America, and he addressed the letter: 'The Earl of Hurst, Hurstpierpoint, Sussex, England.'

THE TEHUANTEPEC SHIP-RAILWAY.

Of the various projects which have been brought forward during the last fifty years to establish interoceanic communication between the Atlantic and Pacific Oceans, none deserves more consideration than that of a railway for the conveyance of ships across the Isthmus of Tehuantepec in Mexico. On the successful completion of the jetties at the mouth of the Mississippi River in 1879, Mr. J. B. Eads conceived the grander project of extending that great river, commercially, into the Pacific Ocean. Since that day to the present moment, his time and energies have been directed to bringing forward and developing this important undertaking. The two principal reasons for its inception are—first, the shortening of the voyage by seven hundred miles over that of Nicaragua, and from twelve hundred to two thousand over that of Panama, on all the main commercial lines of the world. Second, the economy of this method in construction and operation.

Immediately on obtaining the concessions from the Mexican government, he visited the Isthmus of Tehuantepec, and took with him engineers, who made the necessary surveys of the route. He extended and completed these surveys two years later, and obtained definite and detailed information which enabled him to locate the line for the construction of the railway, and to make the necessary sections and plans of the work, and a careful and detailed estimate of the cost of construction. These surveys showed that the ground was favourable over its entire length for the construction of a railway. These and other previous examinations made by other parties also established the fact that the climatic conditions were not unfavourable, and also that valuable materials and available labour were procurable on the Isthmus.

While the surveys were being made upon the Isthmus, and the estimates prepared, close attention was given to the mechanical appliances. The result has been that arrangements have been made for lifting, hauling, and handling vessels up to five thousand tons, and for conveying them by rail from ocean to ocean. These mechanical appliances are briefly as follows. The Coatzacoalcos River drains the main valley of the Isthmus on the Atlantic side. At its mouth is a bar, composed of alluvium brought down by the river. There are now fifteen feet of water on this bar, which can be cheaply deepened by means of parallel jetties. Inside the bar is a fine anchorage for ships with sixty feet depth of water. The river for twenty-five miles will be utilised for navigation. The terminus of the railway will be located at Minatitlan. An excavated basin from the river leads to the lifting-dock, which will be capable of raising the largest vessels in about fifteen minutes. It will be about four hundred and seventy-five feet in length, seventy-five feet in width, and twelve feet in depth, built of steel plates, with substantial bulkheads fore and aft and athwartships.

On a second deck, about seven feet below the upper deck, will be built a system of hydraulic rams, perhaps one hundred and fifty or more in number. These are to be connected together by pipes, and the whole system connected with an hydraulic pressure-pump, for actuating the rams.

The rams are arranged in longitudinal lines and cross lines, and the latter are spaced six feet seven inches apart. Under the central part of the vessel there will be one ram under the keel, one under the bottom on each side, one under the bilge, and one at the side of the vessel. These rams when raised come up through the upper deck of the floating dock. On this upper deck are placed six ponderous rails like those to be used on the railway. The carriage for transporting the vessels has a system of supports that correspond exactly with the rams in the dock. There is a continuous keel-block, and the supports, as well as the keel-block, are actuated by the rams underneath. Powerful centrifugal pumps will pump the water from the pontoon, which rises with the carriage upon it, under the vessel. Just before coming into contact with the vessel, the hydraulic pressure-pumps raise the presses under the supports, and bring the latter up to the vessel's hull, so that they exert a gentle pressure against the keel, bottom, and bilges, besides bringing up a series of adjustable girths at the sides of the vessel.

As the vessel rises slowly out of the water, its weight becomes greater and greater upon the supports, and consequently upon the rams that are holding them up. The peculiar arrangement of the rams causes the weight of the vessel to be equalised over the whole system, so that when it is entirely out of the water, and its whole weight resting upon the rams, they must bear it equally from stem to stern and from side to side. The supports, as they are thus placed against the vessel by the rams, are now locked to the girders of the carriage by adjusting nuts or hand-wheels, which are run down on the screw-thread cut into the columns of the supports. When this is done, the valve of the pressure-pump is opened, and the water which was under compression and held up the rams, escapes, and the rams recede downward into the pontoon. By this means the distributed weight of the vessel is transported to the carriage, and it now rests upon the girders in the same way that it rested upon the cross-lines of the rams. For instance, if there are thirty lines of rams, and the vessel weighs three thousand tons, there would be just one hundred tons upon each line of rams. When the load is transported from the rams to the carriage, there will be one hundred tons upon each of the thirty girders. Now there are just as many wheels under one girder as under another; consequently, each wheel bears its exact proportion of the load; that is, if the whole weight is thirty-six hundred tons, and there are three hundred and sixty wheels, there will be just ten tons, no more and no less, upon each wheel. It is not intended to bring more than eight or nine tons upon a wheel, although in their manufacture they will be tested to twenty tons. There is with each wheel a powerful spring, which will also be tested to bear a weight of twenty tons before closing. They will have a 'run' of about six inches; and when the maximum load is upon them there will still be a space of about three or four inches, which will allow the carriage to overcome any slight irregularities there may be in the track, and will also give an easy cushion for the vessel and the carriage to rest upon during the journey across the Isthmus.

The power for transporting vessels across the Isthmus will be one, two, three, or more locomotive engines of very powerful construction, capable of hauling two or three thousand tons each; such locomotives have already been constructed, and still larger ones may be, without going beyond the limits of a proper construction. The road-bed will be built of materials which are found on the whole line of the road; and the superstructure of the road-bed will consist of two feet of broken stone ballast and long steel-plated ties, on which will rest six steel rails, weighing from one hundred to one hundred and twenty-five pounds per lineal yard. The gradients to be overcome are comparatively light, and can be surmounted by locomotive power. The changes of direction, where it is necessary to make them to save very heavy mountain cuttings, will be made by large floating turn-tables. The vessel with its carriage will be run upon these tables; the water will then be pumped out of the pontoons which constitute the tables, and they will be revolved, resting upon a cushion of water, until they are in the new direction required. There are five of these floating turn-tables required to make the changes of direction. On the Pacific side, the terminus will be in a lake or lagoon, which will require dredging to give thirty feet of depth; and the harbour on this side will be commodious and entirely protected from the sea.

These in general are the plans proposed; and more recent investigations in reference to the comparative economy of transportation by ship-canal and ship-railway have shown conclusively that the latter is more economical both in construction and in operation. There is no doubt that ships may be moved with economy and with safety at a speed of about ten miles per hour, so that the distance of one hundred and thirty-four miles may be traversed, all delays included, in from eighteen to twenty hours. The time required to pass through the Panama Canal, about fifty miles in length, will not be less than twenty-four hours, comparing it with the time required in the Suez Canal. The canal at Nicaragua, one hundred and eighty-six miles total length, with from twelve to twenty locks, may require, perhaps, four days for ships to pass from ocean to ocean. The cost of the Panama Canal, as recently given by the naval officers of the United States and by other unprejudiced parties who have examined the work, and also by the *London Financial News*, is three hundred million to six hundred million dollars. The cost of the Nicaragua Canal would probably be not less than two hundred millions; the most reliable estimate being that of Major M'Farland, U.S.A., who estimated it at one hundred and forty million dollars.

It is more than probable that Mexico and the United States will unite to bring forward this important project to a speedy conclusion. The

work of construction, it is hoped, will commence in earnest this coming year; and it is calculated that four years is sufficient to complete and put the railway into operation.

A LITTLE TOAD-LORE.

When the faint bloom of dew is upon the lawn of a country-house, an odd creature will sometimes crawl out from amidst the thickets of rose and dahlia. Its presence is tolerated there, but only because grubs and slugs are worse company still. If its habits were not so secret, if it were given to parading where muslins flutter and clouded canes stab the air, it would hardly be permitted to find a covert in the old garden. And even as it is, there are few people who do not regard the toad with some aversion.

The strange tadpole transformations; the absorption of the tail, the gradual change of a gill-breather into a lung-breather—these wonders are common both to the toad and the frog families. But there is a considerable difference in the appearance of the spawn of the two reptiles: frog-spawn is deposited in masses, toad-spawn in strings that are often from twenty to thirty feet in length. The dots, too, that develop into toads are smaller and darker than those that indicate the incipient frogling. Later on in life, further points of difference are established. The frog has a large array of feeble teeth; the toad is toothless, whilst warts (or tubercles) exuding an acrid juice are peculiar to the latter animal. This distillation, it may be remarked here, is more acrid than the poison of serpents, but has not a like injurious effect when taken into the circulation. Toads are commonly tailless, but Carpenter tells us that tadpoles secluded from the light and kept at a low temperature will retain their tails and continue to grow as tadpoles. This explanation is strengthened and illustrated by the fact that the proteus, which inhabits underground lakes in the Tyrol, and is a member of the same family as the toad, has a tail somewhat tadpole-like.

The toad when squatted in the moss of a hill-side, or when dug out of a garden border, looks anything but a lively and active animal. His appearance somewhat belies him. He has a more than womanly quickness of tongue, for instance; the root of that organ is placed near to the front of the mouth, and when at rest, its tip reposes in the aperture of the throat. Its motions are of a marvellous rapidity: the eye cannot follow them; a passing insect seems to melt into thin air, rather than to be caught by that agile organ and swallowed. As a climber, too, the toad is more than respectable, and there are numerous instances on record of his powers in this direction. He has been known to mount plastered and white-washed walls, to ascend flights of steps, and even to perform the feat of getting into a flower-pot; no easy matter, when the inclination of the exterior is considered. In accounting for these climbing feats, the very considerable stretch of his body and limbs when extended must not be forgotten. Capable, like the lion, of large meals and of long abstinences, the toad has a lion-like pride about the nature of his food. It is said that he will not prey upon anything that is not in motion; he disdains all butcher-meat, and has a gentlemanly instinct for pursuing flying game. Slugs, grubs, and worms and insects are the 'chief of his diet;' and there is an account of a naturalist who used to dissect toads and obtain rare insects, which he promoted from the stomach to the cabinet. There is little doubt that toads will eat bees and defy stings; as many as thirty-two bees have been found on opening a toad; and wasps and bees have been seen hanging by their stings to the mouths of toads. Snakes eat toads; and toads sometimes return the compliment, and eat small snakes. The toad's oddest meal, however, is that which he makes upon his own skin. When this is cast off, he rolls it into a commodious parcel and swallows it; thus affording an illustration of economy that would appear to have been overlooked by many instructors. This shedding of the skin causes the toad to appear of different colours at different times, and some people have been led to believe that his complexion changes with the weather. Other points of interest about him are the humiliating resemblance of the muscles of his thigh and leg to those of a man; the curious fact that he cannot breathe if his mouth be held open; and the equally curious fact that in his family, as in that of the cuckoos, there is a large preponderance of males.

The distribution of the toad in our islands is rather irregular; in a few districts, toads are even more numerous than frogs; in general they are much scarcer. The natterjack toad, distinguished by a bright yellow line along the middle of the back, and other peculiarities, while found in some localities, is entirely absent in others. In Gilbert White's time, this variety was plentiful in the neighbourhood of Selborne, but is said now to have entirely disappeared. The common opinion, that there are no toads in Ireland, is incorrect; in the south-western parts of the island the natterjack abounds, in spite of the strenuous disbelief of all true Irishmen in his existence. Either the natterjack or the common toad makes an amusing pet, and even where they are kept indoors, are easily fed on worms and meat. They have an advantage, too, over other pets, insomuch as they are creatures that will live forty or fifty years, or even more, in confinement.

The toad has an interesting natural history, and an unnatural history not less entertaining. There are the well-worn stories of the jewel in the toad's head, and of his sojournings for years in stone. There is a queer old story, too, of his resorting to a certain plant in order to cure himself of spider-bites. The old necromancers used him freely, and two toads dressed in green velvet that were unearthed some years ago had probably been part of the stock-in-trade of a friend of darkness. Nor are superstitions about toads gone from England yet; there are localities where the application of a toad is supposed to stop bleeding, and a dried toad is worn as a charm against rheumatism. In Devonshire, there is a family of foreign extraction, widely scattered over the county, whose members have a reputation for curing 'king's evil' by means of toads. In Tibet, according to Hué, the toad has a more terrible office. A kind of arch-toad dwells amidst

the mists of a lofty mountain-range, and unless duly propitiated, flings ice and avalanches down upon those who painfully thread the passes of the region!

FARMING AND FRUIT-CULTURE IN CALIFORNIA.

A farmer and fruit-grower in California writes as follows to the *Field:*

'Although I cannot entirely indorse the many encomiums which have lately been so lavishly bestowed upon the resources of our Golden State, I can truly say that it offers to intending emigrants, who are able and willing to work, opportunities for profitably investing a small capital, and obtaining in a few years a valuable property and a competence for life, which can hardly be found in any other portion of the globe.

'The errors into which I find most of my fellow-countrymen have fallen are, either purchasing too largely in proportion to their means, or making injudicious selections of land in their haste to commence operations. The result of my observation and experience is that the object of every settler should be to plant as many acres of vines and orchard as he can, and make both ends meet, pending their fruition, by what is called mixed farming. We make excellent wine, which sells at highly remunerative prices; and most of our counties produce excellent fruit, which, in canned form, has obtained a world-wide reputation.

'Space will not permit me to enter minutely into the profits of viticulture and horticulture; but a clear net profit of sixty pounds an acre is far from an excessive estimate of what is being regularly realised from the two last-named industries. Orchards or vineyards, however, like Rome, are not built in a day; and therefore it is necessary that a man of moderate means should, while they are maturing, produce cereal and root crops, not for sale as such, but in the more profitable form of stock, hogs, poultry, &c., for which there is a ready sale at good prices.

'To illustrate what can be done, I will take my own county of San Luis Obispo, where vines, olives, and all non-tropical fruits flourish in profusion. There good land, with ready access to market, can be bought at prices varying from one to three pounds an acre, adapted in all respects to the purposes I have mentioned; so that, with a minimum capital of six hundred pounds, an energetic man can acquire within six years a vineyard and orchard, producing a handsome income, and be able to exist in the meanwhile by his mixed farming. To carry out this plan, it is obvious that the settler must have some knowledge of viticulture and general farming, which he can only acquire thoroughly by working under some practical farmer, and taking ample time in selecting a suitable location, when, but not until, he is satisfied such occupation is certain to suit him.

'I have entirely ignored grain-raising, as, in my opinion, small capitalists cannot compete with men who, with all the appliances of modern science, grow wheat by the mile. Cattle-raising, though profitable, requires a large capital both to buy land and then stock it.

'One great factor in the happiness, contentment, and prosperity of the farmer is the excellence of the climate. The mean temperature of San Luis Obispo in January is fifty-six degrees Fahrenheit, and in July sixty-six degrees Fahrenheit. As compared with the mean temperature of Surrey, we find it fourteen degrees warmer in winter and two cooler in summer. The shortest day gives two hours more sunlight than in England, and the rainfall for the last twenty years averages twenty inches.

'It has been said that the greatest pleasures are the cheapest, and here we have excellent amusements at a nominal cost. We have lawn-tennis, polo, good shooting and fishing; and private theatricals are much in vogue, *Our Boys* having been played in our village hall with great success. We get all important news from Europe by telegraph in our local papers on the same day, and altogether are well within the pale of civilisation; and my young English friends here thoroughly enjoy alike their work and their play.'

HOMELESS.

Sad and weary, lonely, old,
Toiling on through winter's cold,
Homeless 'mid the snow and sleet,
Ragged limbs and naked feet,
Helpless, feeble, bent, and gray,
There he sweepeth all the day,
None to pity, none to give
Aught that makes it life to live.
Love—the word that makes a home
Far or near, where'er we roam;
Love—that guides us on our way
Through the dusk of sorrow's day;
Love—ah! what a power is this,
Filling darkest hour with bliss:
But he stands, the sweeper old,
Loveless, homeless, pale and cold,
'Mid the city vast and dim,
Not one soul to care for him.
Darkness sinks upon the street,
Snow is falling, swift and deep,
Yet he creepeth slowly on,
Faltering sorely, weak and wan.
Now before his dim old eyes,
Distant dreams of beauty rise,
Dreams of moments long, long dead,
Days and hours for ever fled;
Cottage home and dewy lane;
Summer-time he sees again;
Children pattering to and fro;
Silvery voices come and go;
Love is there, and Joy, and Home—
Whence no more his feet shall roam.

For a beam of glorious day
Chases all his dreams away;
Angel voices swell the song;
Harps are pealing loud and long;
Gates of heaven, dazzling, bright;
Glory bursts upon his sight.
Rest at last, no more to roam—
God in love has brought him Home.

P. M.

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